Filed: September 24, 1993

Preliminary Amendment, Response to Notice to Comply With Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosures and Declaration under 37 C.F.R. § 1.821(f)

## <u>In</u> the Claims

8. (amended) The analog of claim 2 wherein the protein contains a change within a short consensus repeat that corresponds with a change to complement receptor one selected from the group consisting of:

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CR1-4 with its first 122 amino acids (SCR1-2) (Sequence ID Nos. 1 and 3) replaced with CR1 amino acids 497-618 (SCR 8-9) (Sequence ID Nos. 2 and 4) and CR1-4(8,9) with deletion of 194-253; substitution of amino acids 271-543 with: T-R-T-T-F-H-L-G-R-K-C-S-T-A-V-S-P-A-T-T-S-R-G-L-R-L-C-A-A-H-P-R-E-T-G-A-L-Q-P-P-H-V-K (Sequence ID No. 11), or structurally similar amino acids.

9. (amended) The analog of claim 2 wherein the protein contains a change within a short consensus repeat that corresponds with a change to complement receptor one selected from the group consisting of:

79: D (amino acid 19 of Sequence ID No. 4); 37,[39]79: Y,D (amino acid 37 of Sequence ID No. 2 and amino acid 19 of Sequence ID No. 4); 92: T (amino acid 32 of Sequence ID No. 4); 109-112: N-A-A-H (amino acids 49-52 of Sequence ID No. 4); 109-112, 114-117, 121: N-A-A-H, S-T-K-P...Q (amino acids 49-52, 54-57, 61 of Sequence ID No. 4); 114-117, 121: [N-A-A-H,] S-T-K-P...Q (amino acids 54-61 of Sequence ID No. 4); 116: K (amino acid 56 of Sequence ID No.

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4); 116,117: K-k (amino acids 56-57 of Sequence ID No. 4); 92-94:

K...Y (amino acids 32-34 of Sequence ID No. 3); 99,103,106:

S...T...I (amino adids 39, 43 and 46 of Sequence ID No. 3); 109-

112: [P-T-V-I] D-T-V+I (amino acids 49-52 of Sequence ID No. 3);

110: T (amino acid 50 of Sequence ID No. 3); 111: V (amino acid

51 of Sequence ID No. 3); 112: I (amino acid 52 of Sequence ID

No. 3); 114: D (amino acid 54 of Sequence ID No. 3); 115: N

con . (amino acid 55 of Sequence ID No. 3); 121: D (amino acid 61 of

Sequence ID No. 3); 117: T (amino acid 57 of Sequence ID No. 3);

1,3: Q...N (amino acids 1,3 of Sequence ID No. 1); 6-9: E-W-L-P

(amino acids 6-9 of Sequence ID\No. 1); 12-16, 18-21: K-L-K-T-

Q...N-A-S-D (amino acids 12-21 of Sequence ID No. 2); 27,29:

S...K (amino acids 27,29 of Sequence ID No. 2); 37: S (amino acid

37 of Sequence ID No. 1); 44, 47, 49 \(\frac{1}{2}\) I...K...S (amino acids 44,

47, 49 of Sequence ID No. 1); 52-54, 5 $\lambda$  59: T-G-A...R...R

(amino acids 52-54, 57, 59 of Sequence ID No. 1); 78-79, 82: K-

G...F (amino acids 18-19, 22 of Sequence IN No. 3); 85, 87: Q...K

(amino acids 25, 27 of Sequence ID No. 3); 12-16, 18-21: [R-P-T-

N-L...D-E-R-E] R-P-T-N-L...D-E-F-E (amino acids 12-21 of Sequence

ID No. 1); 27,29: Y...N (amino acids 27, 29 of Sequence ID No.

1); 35, 64-65, 94: G...R-N...Y (amino acid 35 of Sequence ID No.

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1, amino acids 4\forall 5, 34 of Sequence ID No. 3), substitutions with structurally similar amino acids, and combinations thereof.

(amended) The analog of claim 2 wherein the 10. complement regulatory protein is decay accelerating factor wherein one or more subatitutions are introduced into the region of the protein corresponding to decay accelerating factor short A-160 concl. consensus repeats SCRs 2-3 selected from the group consisting of S-T-K-P-P-I-C-Q (amino acids 54-61 of Sequence ID No. 4); 175-178: N-A-A-H (amino acids 49-52 of Sequence ID No. 4); 175-187: S-T-K-P-P-I-C-Q-N-A-A-H \(\sequence ID No. 9); 130: R (amino acid 4 of Sequence ID No. 3); 145: D (amino acid 19 of Sequence ID No. 4); 77-84: K-L-K-T-Q\T-N-A-S-D (amino acids 12-21 of Sequence ID No. 2); 90-92: S-L-K (amino acids 27-29 of Sequence ID No. 2), substitutions with structurally similar amino acids, and combinations thereof.

Sub 12 (amended) The method of claim 17 wherein the 23. protein contains a change within a short consensus repeat that corresponds with a change to complement receptor one selected A-100 from the group consisting of:

> CR1-4 with its Airst 122 amino acids (SCR1-2) (Sequence ID Nos. 1 and 3) replaced with CR1 amino acids 497-618 (SCR 8-9) (Sequence ID Nos. 2 and 4) and CR1-4(8,9) with deletion of 194-

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253; substitution of amino acids 271-543 with: T-R-T-T-F-H-L-G-R-K-C-S-T-A-V-S-P-A-T-T-S-E-G-L-R-L-C-A-A-H-P-R-E-T-G-A-L-Q-P-P-H-V-K (Sequence ID No. 11), or structurally similar amino acids.

24. (amended) The method of claim 17 wherein the protein contains a change within a short consensus repeat that corresponds with a change to complement receptor one selected from the group consisting of:

79: D (amino acid 19 of Sequence ID No. 4); 37,[39]79: Y,D (amino

acid 37 of Sequence ID No. 2 and amino acid 19 of Sequence ID No.

A-100 cont.

4); 92: T (amino acid 32 of Sequence ID No. 4); 109-112: N-A-A-H (amino acids 49-52 of Sequence ID No. 4); 109-112, 114-117, 121: N-A-A-H, S-T-K-P...Q (amino acids 49-52, 54-57, 61 of Sequence ID No. 4); 114-117, 121: [N-A-A-H,] S-T-K-P...Q (amino acids 54-61 of Sequence ID No. 4); 116: K (amino acid 56 of Sequence ID No. 4); 116,117: K-P (amino acids 56-57 of Sequence ID No. 4); 92-94: K...Y (amino acids 32-34 of Sequence ID No. 3); 99,103,106: S...T...I (amino acids 39, 43, 46 of Sequence ID No. 3); 109-112: [P-T-V-I] D-T-V-I (amino acids 49-52 of Sequence ID No. 3); 110:

T (amino acid 50 of Sequence ID No. 3); 111: V (amino acid 51 of Sequence ID No. 3); 112: I (amino acid 52 of Sequence ID No. 3); 114: D (amino acid 54 of Sequence ID No. 3); 115: N (amino acid

55 of Sequence ID No. 3); 121: D (amino acid 61 of Sequence ID

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No. 3); 117: T amino acid 57 of Sequence ID No. 3); 1,3: Q...N (amino acids 1,3 of Sequence ID No. 1); 6-9: E-W-L-P (amino acids 6-9 of Sequence ID No. 1); 12-16, 18-21: K-L-K-T-Q...N-A-S-D (amino acids 12-21 of Sequence ID No. 2); 27,29: S...K (amino acids 27 and 29 of Sequence ID No. 2); 37: S (amino acid 37 of Sequence ID No. 1); 44, 47, 49: I...K...S (amino acids 44, 47, 49 of Sequence ID No. 1); 52-54, 57, 59: T-G-A...R...R (amino acids 52-54, 57, 59 of Sequence ID No. 1); 78-79, 82: K-G...F (amino acids 18-19, 22 of Sequence ID No. 3); 85, 87: Q...K (amino acids 25, 27 of Sequence ID No. 3); 12-16, 18-21: [R-P-T-N-L...D-E-R-E] R-P-T-N-L...D-E-F-E (amino acids 12-21 of Sequence ID No. 1); 27,29: Y...N (amino acids 27, 29 of Sequence ID No. 1); 35, 64-65, 94: G...R-N...Y (amino acid 35 of Sequence ID No. 1, amino acids 4-5, 34 of Sequence ID No. 3), substitutions with structurally similar amino acids, and combinations thereof.

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25. (amended) The method of claim 17 wherein the complement regulatory protein is decay accelerating factor wherein one or more substitutions are introduced into the region of the protein corresponding to decay accelerating factor short consensus repeats SCRs 2-3 selected from the group consisting of 180-187: S-T-K-P-P-I-C-Q (amino acids 54-61 of Sequence ID No. 4); 175-178: N-A-A-H (amino acids 49-52 of Sequence ID No. 4);

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Sub A-100 cond. 175-187: S-T-K-P-P-I-C-Q-N-A-A-H (Sequence ID No.9); 130: R

(amino acid 4 of Sequence ID No. 3); 145: D (amino acid 19 of

Sequence ID No. 4); 77-84: K-L-K-T-Q-T-N-A-S-D (amino acids 12-21

of Sequence ID No. 2); 90-92: S-L-K (amino acids 27-29 of

Sequence ID No. 2), substitutions with structurally similar amino acids, and combinations thereof.

These changes are made solely to correct obvious typographical errors and to comply with the requirements under 37 C.F.R. §§ 1.821-1.825.

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## Declaration under 37 C.F.R. § 1.821(f)

I declare that the material on the diskette is identical to the enclosed paper copy of the Gene Sequence Listing and the sequences as filed in the application on September 24, 1993, that the Gene Sequence Listing does not add new matter to the application, and that all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Patrea I. Pabst Reg. No. 31,284

Date: February 10, 1994

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